AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) An albumin fusion protein comprising a member selected from the group consisting of:

(a) ~~a Therapeutic protein X~~ a protein encoded by HEMCM42 and albumin, wherein albumin comprises ~~comprising~~ the amino acid sequence of SEQ ID NO:18;

(b) ~~a Therapeutic protein X~~ a protein encoded by HEMCM42 and a fragment or a variant of the amino acid sequence of SEQ ID NO: 18, wherein said fragment or variant has ~~albumin activity~~ the ability to prolong the serum half-life of the protein encoded by HEMCM42 compared to the serum half-life of the protein encoded by HEMCM42 in an unfused state;

~~(c) a Therapeutic protein X and a fragment or a variant of the amino acid sequence of SEQ ID NO: 18, wherein said fragment or variant has albumin activity, and further wherein said albumin activity is the ability to prolong the shelf life of the Therapeutic protein X compared to the shelf-life of the Therapeutic protein X in an unfused state;~~

(c) ~~(d)~~ ~~a Therapeutic protein X~~ a protein encoded by HEMCM42 and a fragment or a variant of the amino acid sequence of SEQ ID NO: 18, wherein said fragment or variant has ~~albumin activity~~ the ability to prolong the serum half-life of the protein encoded by HEMCM42 compared to the serum half-life of the protein encoded

by HEMCM42 in an unfused state, and further wherein the fragment or variant comprises the amino acid sequence of amino acids 1-387 of SEQ ID NO:18;

(d) ~~(c)~~ a fragment or variant of ~~a Therapeutic protein X~~ a protein encoded by HEMCM42 and albumin comprising the amino acid sequence of SEQ ID NO: 18, wherein said fragment or variant has a biological activity of the ~~a Therapeutic protein X~~ protein encoded by HEMCM42;

(e) a fragment or variant of a protein encoded by HEMCM42, wherein said fragment or variant of the protein encoded by HEMCM42 has a biological activity of the protein encoded by HEMCM42, and a fragment or variant of the amino acid sequence of SEQ ID NO: 18, wherein said fragment or variant of the amino acid sequence of SEQ ID NO: 18 has the ability to prolong the serum half-life of the protein encoded by HEMCM42 compared to the serum half-life of the protein encoded by HEMCM42 in an unfused state;

(f) ~~a Therapeutic protein X~~ a protein encoded by HEMCM42, or fragment or variant thereof, and albumin, or fragment or variant thereof, of (a) to (e), wherein the ~~a Therapeutic protein X~~ protein encoded by HEMCM42, or fragment or variant thereof, is fused to the N-terminus of albumin, or the N-terminus of the fragment or variant of albumin;

(g) ~~a Therapeutic protein X~~ a protein encoded by HEMCM42, or fragment or variant thereof, and albumin, or fragment or variant thereof, of (a) to (e), wherein the ~~a Therapeutic protein X~~ protein encoded by HEMCM42, or fragment or variant thereof, is fused to the C-terminus of albumin, or the C-terminus of the fragment or variant of albumin;

(h) ~~a Therapeutic protein X~~ a protein encoded by HEMCM42, or fragment or variant thereof, and albumin, or fragment or variant thereof, of (a) to (e), wherein the ~~a Therapeutic protein X~~ protein encoded by HEMCM42, or fragment or variant thereof, is fused to the N-terminus and C-terminus of albumin, or the N-terminus and the C-terminus of the fragment or variant of albumin;

(i) ~~a Therapeutic protein X~~ a protein encoded by HEMCM42, or fragment or variant thereof, and albumin, or fragment or variant thereof, of (a) to (e), which comprises a first ~~a Therapeutic protein X~~ protein encoded by HEMCM42, or fragment or variant thereof, and a second ~~a Therapeutic protein X~~ protein encoded by HEMCM42, or fragment or variant thereof, wherein said first ~~a Therapeutic protein X~~ protein encoded by HEMCM42, or fragment or variant thereof, is different from said second ~~a Therapeutic protein X~~ protein encoded by HEMCM42, or fragment or variant thereof;

(j) ~~a Therapeutic protein X~~ a protein encoded by HEMCM42, or fragment or variant thereof, and albumin, or fragment or variant thereof, of (a) to (i), wherein the ~~a Therapeutic protein X~~ protein encoded by HEMCM42, or fragment or variant thereof, is separated from the albumin or the fragment or variant of albumin by a linker; and

(k) ~~a Therapeutic protein X~~ a protein encoded by HEMCM42, or fragment or variant thereof, and albumin, or fragment or variant thereof, of (a) to (j), wherein the albumin fusion protein has the following formula:

R1-L-R2; R2-L-R1; or R1-L-R2-L-R1,

and further wherein R1 is ~~a Therapeutic protein X~~ a protein encoded by HEMCM42, or fragment or variant thereof, L is a peptide linker, and R2 is albumin comprising the amino acid sequence of SEQ ID NO: 18 or a fragment or variant of albumin~~;~~

~~and wherein the a Therapeutic protein X of (a) to (k) is selected from at least one of the proteins set forth in Table 1~~.

2. (Currently Amended) The albumin fusion protein of claim 1, wherein the serum half-life ~~shelf-life~~ of the albumin fusion protein is greater than the serum half-life ~~shelf-life~~ of the protein encoded by HEMCM42 ~~a Therapeutic protein X~~, or fragment or variant thereof, in an unfused state.

3. (Currently Amended) The albumin fusion protein of claim 1, wherein the in vitro biological activity of the ~~a Therapeutic protein X~~ protein encoded by HEMCM42, or fragment or variant thereof, fused to albumin, or fragment or variant thereof, is greater than the in vitro biological activity of the ~~a Therapeutic protein X~~ protein encoded by HEMCM42, or fragment or variant thereof, in an unfused state.

4. (Currently Amended) The albumin fusion protein of claim 1, wherein the in vivo biological activity of the ~~a Therapeutic protein X~~ protein encoded by HEMCM42, or fragment or variant thereof, fused to albumin, or fragment or variant thereof, is greater than the in vivo biological activity of the ~~a Therapeutic protein X~~ protein encoded by HEMCM42, or fragment or variant thereof, in an unfused state.

5-12. (Canceled)

13. (Previously Presented) The albumin fusion protein of any one of claims 1-4, which is nonglycosylated.

14. (Previously Presented) The albumin fusion protein of any one of claims 1-4, which is expressed in yeast.

15. (Original) The albumin fusion protein of claim 14, wherein the yeast is glycosylation deficient.

16. (Original) The albumin fusion protein of claim 14 wherein the yeast is glycosylation and protease deficient.

17. (Previously Presented) The albumin fusion protein of any one of claims 1-4, which is expressed by a mammalian cell.

18. (Canceled)

19. (Previously Presented) The albumin fusion protein of any one of claims 1-4, wherein the albumin fusion protein further comprises a secretion leader sequence.

20. (Previously Presented) A composition comprising the albumin fusion protein of any one of claims 1-4 and a pharmaceutically acceptable carrier.

21-29. (Canceled)

30. (New) An albumin fusion protein of claim 1, which has been expressed from a host cell comprising a promoter element operatively associated with a DNA encoding said fusion protein.

31. (New) An albumin fusion protein of claim 19, which has been expressed from a host cell comprising a promoter element operatively associated with a DNA encoding said fusion protein.

32. (New) An albumin fusion protein of claim 30, wherein the host cell further comprises a termination sequence operatively associated with a DNA encoding said fusion protein.

33. (New) An albumin fusion protein of claim 31, wherein the host cell further comprises a termination sequence operatively associated with a DNA encoding said fusion protein.